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A COMPARATIVE STUDY OF DEPRESSION AND ANXIETY AMONG MEDICAL AND ENGINEERING STUDENTS

Laishram Sarojkumari Devi [1] | Dr. Nishi Fatma [2]

[1] M.Sc. Clinical Psychology, Department of Clinical Psychology, NIMS University, Jaipur, Rajasthan.
[2] Department of Clinical Psychology, NIMS University, Jaipur, Rajasthan.

ABSTRACT

The present study was been undertaken with a view to compare the levels of anxiety and depression among the medical and engineering students in Jaipur. The data was collected through accidental sampling method with total sample of 120 students comprising of 60 medical and 60 engineering students. Samples were been taken from two different educational institutes of Jaipur City.Depression and Anxiety Test were been used in this study for the measurement of the levels of depression and anxiety respectively. There has been much research to suggest that depression, anxiety and stress among students are common but there are less research works on the comparison of the anxiety and depression among medical students and engineering students.Statistical method t-test was usedto find out if there is any significant difference in the level of anxiety and depression among the students of medical and engineering courses. Results were found that the medical students are more depressed and have more anxiety at 0.01 significant valuesas compared to the engineering students.

KEY WORDS: Depression, Anxiety, Medical and Engineering students.

INTRODUCTION

Nowadays, it is very important to identify the emotional challenges that students face in higher education. Mostly depression and anxiety are the most prevalent problems in college students (Pyari, 2015). Higher education is also consideredas a stressful period in student's life, which they have to cope with since they are facing a variety of problems such as living away from their families, a heavily loaded curriculum, and inefficiency in both mentor- mentee and health education programs.This will make them more vulnerable to emotional disturbances such as stress, anxiety and depression(Ali et al., 2014).It is very much important to recognize the early warning signs and symptoms of depression and anxiety in adolescence for early preventive interventions to avoid development of a severe depressive illness(Black 2012). According to the National Institute of Mental Health, nearly a quarter mental health services are required on the campus. Jerald Kay M.D. Professor and chairman of the Department of Psychiatry at the Wright State University School of Medicine described that in the past fifteen years depression has doubled and suicide tripled among students (Pyari 2015). Depression is a common mental disorder that is present with depressed mood, loss of interest, feeling of guilt or low self-worth, disturbed sleep, low energy and poor concentration (Sabate, 2014). The major criteria for depressive disorder is sad mood or loss of pleasure in usual activities such as sleeping too much or too little, psychomotor retardation or agitation, poor appetite and weight loss or increased appetite and weight gain, loss of energy, feeling of worthlessness, difficulty concentration or making decision and recurrent thoughts of death or suicide(Kring, 2011). Anxiety is also one of the most widely experienced emotion and essential constructs of all human behavior. It is a displeasing feeling of uneasiness, nervousness, appreciation, fear, concern or worry and it's the mental state that result from a difficult challenge for which the subject has to insufficient coping skill (Barlow, 2002). Anxiety can be identified by a variety of physical, emotional, cognitive and behavioral symptoms. Palpitations, sweating, trembling, shortness of breath, sense of choking, chest pain, headache, nausea, stomach upset, dizziness, numbness or tingling, chills or hot flashes, restlessness, fatigue, muscle tension and sleep problems are the physical changes (Bourne, 2005).The emotional effects of anxiety may include feelings of apprehension or dread, a general sense of depression, doom and gloom, anticipating the worst and having nightmares/bad dreams. The cognitive effect is being unable to think, feeling as if the mind has gone blank, difficulty in concentrating, irritability and watching for signs of danger (Ohman, 2000). The behavioral effects of anxiety may include withdrawal from situations which provoke anxiety, nervous habits, and increased motor tension like foot tapping (Barker, 2003). Students with anxiety disorder exhibit a passive attitude in their studies such as lack of interest in learning, poor performance in exams, and do poorly on assignments. The anxiety's psychological symptoms among students include feeling nervous before a tutorial class, panicking, going blank during a test, feeling helpless while doing assignments, or lack interest in a difficult subject whereas the physiological symptoms include sweaty palms, cold, nervousness, panic, fast pace of breathing, racing heartbeat, or an upset stomach (Ruffins, 2007). Many studies stated that engineering students are less prone to the development of anxiety compare to medical student. Anxiety had a significant negative relationship with academic achievement of medical students, whereas significant differences were reveal between medical and engineering students (Singh, 2013). The reasons for the high prevalence of psychological distress in medical students can be attributed to excessive stress of studies, a higher academic burden in terms of syllabus, courses and required competence, lack of leisure time, and high competition (Firth, 1986;Supe 1988).

Vikram S, T (2012) studied to assess and compare depression among professional students from different areas. According to their studies, there is a significant difference among Medical Students, Engineering Students and Physical Education Students in relation to Depression. Physical Education Students possessed greater/higher Depression in comparison to Medical Students, and Engineering Students. The studied said that Physical Education Students are anxious about their future career prospects and grades during course which leads to tendency of Depression in them in comparison to Medical Students and Engineering students.

OBJECITVES OF THE STUDY-

Following are the main objectives of the study:
1. To compare the anxiety in medical and engineering students.
2. To compare the depression among medical and engineering students.

HYPOTHESIS -

The following null hypotheses were tested:
1. There is no significant difference of anxiety among medical and engineering students.
2. There is no significant difference of depression among medical and engineering students.

MATERIAL AND METHOD -

SAMPLING METHOD –

In this study 120 samples were selected through accidental sampling in medical and engineering students.60 were medical and 60 were engineering students from two different educational institutes of Jaipur city.

Used tool -

Depression test – Developed&standardized by Prof. O. P. Mishra, Dr.V.B.Verma and Santosh Kumar, published by Agra Psychological cell Agra (U.P.). In this test consists 32 items and 5 point scale. Administered in 18 years and above age group.

Sinha's Comprehensive anxiety test– This testconsists of 90 items were scored on a two point scale.For any response indicated as 'YES' the testee should be awarded the score of one, and zero for 'No'. Total all positive response should be anxiety score of the subject. This test developed by Sinha and Sinha.

RESULT AND DISCUSSION -

Table 1
Depression level of medical and engineering students

GROUP	MEAN	SD	SED	t-value
MEDICAL	85.77	15.0525	2.95	4.909
ENGINEERING	71.29	17.194		
df=118		N_1=60		N_2=60
Significant at 0.01				

Table 2
Anxiety level of medical and engineering students

GROUP	MEAN	SD	SED	t-value
MEDICAL	43.18	10.561	1.855	5.067
ENGINEERING	33.78	9.743		
df=118		N_1=60		N_2=60
Significant at 0.01				

Table 1 shows the levels of depression among medical students and engineering students, indicates mean value of depression of medical students is 85.7666 and SD is 15.0525, and the mean value of depression of engineering students is 71.288 and SD is 17.194. The level of depression indicates that medical students are more depressed as compared to the engineering students. To strengthen this statement, the significant difference was analyzed using t test, where the t value is found to be 4.909, which is significant at 0.01level.Pyari, D (2015) was foundthat medical students are more depressed in comparison to engineering students in (ADSS Anxiety Depression Stress Scale) but is by chance, as the difference is not significant statistically.

Similarly, Table 2 shows the levels of anxiety among medical students and engineering students. It indicates mean value of anxiety of medical students is 43.183 and SD is 10.5617, and the mean value of anxiety of engineering students is 33.783 and SD is 9.7435. The level of anxiety indicates that medical students have more anxiety compared to the engineering students. To strengthen this statement, the significant difference was analyzed using t-ratio, where the t-value is found to be 5.0671, which is significant at the level of 0.01.On the basis of the result it can be said that medical students have more anxiety in comparison to engineering students. Thus, from Table 1 and 2, it is pertinent that the medical students are more depressed and have more anxiety as compared to the engineering students. Therefore, the hypotheses that there is no significant difference of depression and anxiety among medical and engineering studentswere rejected. Naveen S. et.al.(2015) found in his study, the total 304 students in different years of each of the professional course (Medical and Engineering students), 33.6% suffered from stress, 49.3% suffered from anxiety and 37.8% suffered from depression in varying levels of severity.

CONCLUSION

After an overlook of results, we can say that medical students are more depressed and anxious compare to engineering students. Medical students expected to learn and master a huge amount of knowledge, attitudes and skills for which they have to work hard which in turn put them under a lot of stress. During our research work, I found that medical students are more depressed and anxious due to more working hour, and have to do their night shift which is not present in the case of engineering students. Medical students deal severe cases or patients regularly but engineering students didn't face these type of cases during study.

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